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 NEWS  3  SEP 09   ACD predicted properties enhanced in REGISTRY/ZREGISTRY
 NEWS  4  OCT 03   MATHDI removed from STN
 NEWS  5  OCT 04   CA/CAplus-Canadian Intellectual Property Office (CIPO) added
                   to core patent offices
 NEWS  6  OCT 13   New CAS Information Use Policies Effective October 17, 2005
 NEWS  7  OCT 17   STN(R) AnaVist(TM), Version 1.01, allows the export/download
                   of CAplus documents for use in third-party analysis and
                   visualization tools
 NEWS  8  OCT 27   Free KWIC format extended in full-text databases
 NEWS  9  OCT 27   DIOGENES content streamlined
 NEWS 10  OCT 27   EPFULL enhanced with additional content
 NEWS 11  NOV 14   CA/CAplus - Expanded coverage of German academic research
 NEWS 12  NOV 30   REGISTRY/ZREGISTRY on STN(R) enhanced with experimental
                   spectral property data

 NEWS EXPRESS  NOVEMBER 18 CURRENT VERSION FOR WINDOWS IS V8.01,
               CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005.
               V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT
               http://download.cas.org/express/v8.0-Discover/

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FILE COVERS 1907 - 1 Dec 2005 VOL 143 ISS 23
FILE LAST UPDATED: 30 Nov 2005 (20051130/ED)


```
=> fusion protein
        249224 FUSION
          9434 FUSIONS
        254283 FUSION
                 (FUSION OR FUSIONS)
       1810847 PROTEIN
       1263057 PROTEINS
       2105815 PROTEIN
                 (PROTEIN OR PROTEINS)
L1       44724 FUSION PROTEIN
                 (FUSION(W)PROTEIN)

=> hcv
          9939 HCV
            19 HCVS
L2        9943 HCV
                 (HCV OR HCVS)

=>
=> L1 and L2
L3         327 L1 AND L2

=> core and L3
        293056 CORE
         63330 CORES
        324149 CORE
                 (CORE OR CORES)
L4         115 CORE AND L3

=> NS3 and L4
          2213 NS3
L5          44 NS3 AND L4

=> NS5 and L5
           882 NS5
L6          19 NS5 AND L5

=> D L6 IBIB ABS 1-19

L6   ANSWER 1 OF 19  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:        2005:984887  CAPLUS
DOCUMENT NUMBER:         143:384632
TITLE:                   Design of novel conformational and genotype-specific
                         antigens for improving sensitivity of immunoassays for
                         hepatitis C virus-specific antibodies
AUTHOR(S):               Lin, Sansan; Arcangel, Phillip; Medina-Selby,
                         Angelica; Coit, Doris; Ng, Philip; Nguyen, Steve;
                         McCoin, Colin; Gyenes, Alex; Hu, Celine; Tandeske,
                         Laura; Phelps, Bruce; Chien, David
CORPORATE SOURCE:        Chiron Corporation, Emeryville, CA, 94608, USA
SOURCE:                  Journal of Clinical Microbiology (2005), 43(8),
```

3917-3924
CODEN: JCMIDW; ISSN: 0095-1137
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The current com. licensed enzyme-linked immunosorbent assays (ELISAs) for hepatitis C virus (**HCV**) mainly use recombinant proteins containing linear epitopes. There is evidence, however, that conformational epitopes of **HCV** are more immunoreactive. Thus, we have designed an **HCV** antibody assay that employs a conformational protein, NS3NS4a PI (with functional protease and helicase activities), and a linear **fusion protein**, multiple-epitope fusion antigen 7.1 (MEFA 7.1) or MEFA 7.2. We have shown that NS3NS4a PI detects early-seroconversion conformation-sensitive antibodies better than c33c antigen. The correct conformation of NS3NS4a PI also cross-reacts with different genotype samples better than the c33c antigen. MEFA 7.1 and MEFA 7.2 incorporate all the major immunodominant and genotype-specific epitopes of **HCV core**, E1, E2 hypervariable region 1 (HVR1), E2 HVR1-plus-HVR2 consensus, **NS3**, NS4, and **NS5** . Since MEFA 7.1 is degraded by the active NS3NS4a PI protease, we designed a second MEFA 7.2 construct in which the six protease cleavage sites found in MEFA 7.1 were eliminated by amino acid mutation. We demonstrate here that MEFA 7.2 remains intact in the presence of NS3NS4a PI and preserves the epitopes present in MEFA 7.1. Compared to currently licensed assays, an ELISA incorporating a combination of the two antigens NS3NS4a PI and MEFA 7.1 or 7.2 demonstrates better serotype sensitivity and detects seroconversion earlier in many com. available panels. We believe that an assay using NS3NS4a PI and MEFA 7.1 or 7.2 may have the potential to replace current **HCV** immunoassays for better sensitivity.
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:324271 CAPLUS
DOCUMENT NUMBER: 142:409691
TITLE: Vaccines comprising optimized multi-epitope nucleic acids or polypeptides to increase immunogenicity against AIDS, hepatitis B, cancer, etc.
INVENTOR(S): Sette, Alessandro; Chesnut, Robert W.; Newman, Mark J.; Livingston, Brian D.
PATENT ASSIGNEE(S): Epimmune Inc., USA
SOURCE: PCT Int. Appl., 261 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005033265	A2	20050414	WO 2004-US12732	20040426
WO 2005033265	C2	20050602		
WO 2005033265	A3	20050909		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-465229P P 20030425
AB The invention relates to multi-epitope nucleic acid and peptide vaccines and methods of designing such vaccines to provide increased immunogenicity against e.g. infection by HBV, **HCV**, HIV and CMV, as well as

. prostate cancer, renal carcinoma, cervical carcinoma, lymphoma, condyloma acuminatum and AIDS. For example, a multi-epitope construct comprises nucleic acids encoding cytotoxic T lymphocyte epitopes of pol, env and **core** proteins of hepatitis B virus.

L6 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:905910 CAPLUS
DOCUMENT NUMBER: 141:378844
TITLE: Inducing a T cell response with recombinant antigen-expressing pestivirus replicons or recombinant pestivirus replicon-transfected dendritic cells, and therapeutic uses
INVENTOR(S): Rehermann, Barbara; Racanelli, Vito; Behrens, Sven-Erik; Tautz, Norbert
PATENT ASSIGNEE(S): The Government of the United States of America as Represented by the Secretary of Health and Human Services, USA; Justus-Liebig-Universitaet Giessen
SOURCE: PCT Int. Appl., 143 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004092386	A2	20041028	WO 2004-US11018	20040410
WO 2004092386	A3	20050512		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-462165P P 20030411
US 2003-463097P P 20030414

AB The present disclosure relates to compds. and methods of generating T cell-mediated immunity, particularly T cell-mediated immunity to Hepatitis C Virus (**HCV**), Respiratory Syncytial Virus (RSV), Human Immunodeficiency Virus (HIV), Mycobacterium tuberculosis, Plasmodium falciparum, and tumors. The method includes (a) administering to the subject an amount of an antigen presenting cell (such as dendritic cell) sufficient to induce the response in the subject, wherein the antigen presenting cell expresses the recombinant antigen from a pestivirus replicon or (b) directly administering the recombinant antigen expressing replicon in form of RNA or DNA.

L6 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:583933 CAPLUS
DOCUMENT NUMBER: 141:255157
TITLE: Cloning and expression of a biotinylated multiple-epitope **HCV** fusion antigen gene
AUTHOR(S): Li, Bao-Chang; Sun, Ping; Yang, Shu-Hua; Wang, Quan-Li
CORPORATE SOURCE: Institute of Blood Transfusion, Academy of Military Medical Sciences, Beijing, 100850, Peop. Rep. China
SOURCE: Zhongguo Shiyan Xueyexue Zazhi (2004), 12(3), 359-362
CODEN: ZSXZAF; ISSN: 1009-2137
PUBLISHER: Zhongguo Shiyan Xueyexue Zazhishe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The aim was to develop a single multiple-epitope fusion antigen which incorporates all of the major immunodominant epitopes from the six functional regions of the **HCV** genome. A nucleic acid sequence consisting of viral **core**, E1, E2, **NS3**, NS4, and

. **NS5** regions was constructed and inserted into the Promega Pinpoint Xa-1 T vector for inducing expression. The protein was expressed in JM109 (DE3) as a **fusion protein** with a 13 kD biotinylated tag to be used for detection and affinity purification Immunogenicity and biotinylated tag of the **fusion protein** were detected by Western blot anal. with pos. anti-**HCV** serum and streptavidin alkaline phosphatase. After purified by Promega SoftLink Soft Release Avidin Resin, the protein was pre-coated on microwell and detected with anti-**core**, anti-**NS3**, anti-NS4 and anti-**NS5** pos. sera by EIA, resp. The results indicated that the recombinant soluble protein was expressed and labeled with biotin successfully, it reacted with anti-**HCV** pos. serum, and exposed all of the major immunogenic epitopes chosen. In conclusion, this recombinant antigen may be used to design an double antigen sandwich anti-**HCV** immunoassay.

L6 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:392569 CAPLUS
DOCUMENT NUMBER: 140:390291
TITLE: Activation of **HCV**-specific T cells using **fusion protein** vaccines comprising **HCV NS3**, NS4, NS5a, and NS5b polypeptides
INVENTOR(S): Houghton, Michael; Coates, Steve; Selby, Mark; Paliard, Xavier
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 136 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004039950	A2	20040513	WO 2003-US33610	20031024
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2505611	AA	20040513	CA 2003-2505611	20031024
EP 1576125	A2	20050921	EP 2003-781368	20031024
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

PRIORITY APPLN. INFO.: US 2002-281341 A 20021025
WO 2003-US33610 W 20031024

AB The invention provides a method of activating hepatitis C virus (**HCV**)-specific T cells, including CD4+ and CD8+ T cells. **HCV**-specific T cells are activated using **fusion protein** vaccines comprising **HCV NS3**, NS4, NS5a, and NS5b polypeptides, polynucleotides encoding such **fusion proteins**, or polypeptide or polynucleotide compns. containing the individual components of these fusions. The method can be used in model systems to develop **HCV**-specific immunogenic compns., as well as to immunize a mammal against **HCV**.

L6 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:162773 CAPLUS
DOCUMENT NUMBER: 140:210733
TITLE: Method and composition for treating and preventing hepatitis C infection
INVENTOR(S): Morham, Scott; Zavitz, Kenton; Hobden, Adrian
PATENT ASSIGNEE(S): Myriad Genetics, Inc., USA

SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004016738	A2	20040226	WO 2003-US22956	20030721
WO 2004016738	A3	20040617		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-397267P P 20020719

AB The present invention provides methods for preventing and treating hepatitis C virus (**HCV**) infection and symptoms thereof by introducing cells displaying a **HCV** altered budding phenotype into a patient, or by administering to a patient nucleic acids, polypeptides and small organic compds. to cause the formation of cells displaying a **HCV** altered budding phenotype in the body of the patient. In particular, the invention provides compns. and methods that affect the ability of **HCV**, or a variant thereof, to utilize the host's cellular machinery for viral budding and egress. The invention relates to the discovery that interfering with the normal ability of viruses to utilize the host cells vesicular trafficking, recycling, and vacuolar sorting machinery for viral propagation can reduce the infectivity of the virus. Accordingly, the invention provides **HCV** treatment methods and compns. based on the modulation of viral budding. Modulation of the normal **HCV** budding mechanism can also enhance the host's immune response against the virus. The invention therefore provides compns. and methods for enhancing an immune response against **HCV**. The invention further provides a method of identifying compds. that modulate the activity of a viral protein host cell protein protein-protein interaction that is involved in a viral egress and/or budding pathway.

L6 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:41605 CAPLUS
DOCUMENT NUMBER: 140:110111
TITLE: **HCV fusion proteins** with modified **NS3** domains for inducing cellular immune response against **HCV** infection
INVENTOR(S): Houghton, Michael
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004005473	A2	20040115	WO 2003-US20996	20030702
WO 2004005473	A3	20040401		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2491508	AA	20040115	CA 2003-2491508	20030702
EP 1539809	A2	20050615	EP 2003-763172	20030702
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005532064	T2	20051027	JP 2004-519849	20030702

PRIORITY APPLN. INFO.:
US 2002-393694P P 20020702
US 2002-394510P P 20020708
WO 2003-US20996 W 20030702

AB The invention provides **HCV fusion proteins** that include a mutated **NS3** protease domain, fused to at least one other **HCV** epitope derived from another region of the **HCV** polyprotein. The fusions can be used in methods of stimulating a cellular immune response to **HCV**, such as activating hepatitis C virus (**HCV**)-specific T cells, including CD4+ and CD8+ T cells. The method can be used in model systems to develop **HCV**-specific immunogenic compns., as well as to immunize a mammal against **HCV**.

L6 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:59621 CAPLUS
DOCUMENT NUMBER: 138:84465
TITLE: Construction of E. coli heat-labile enterotoxin expression vector pGEM-LTB and uses as vaccine
INVENTOR(S): Cheng, Fang; Xiao, Yunning; Wang, Yanrong
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1340625	A	20020320	CN 2000-122857	20000830

PRIORITY APPLN. INFO.:
CN 2000-122857 20000830

AB The present invention provides the recombinant expression vector pGEM-LTB containing the full-length nucleotide sequence of plasmid pGEM and the nucleotide sequence of humanized thermolabile enterotoxin beta (LTB) of E. coli. The fusion expression vector pGEM-LTB is constructed and used to express one or more of exogenous genes or express the small mol. polypeptide for the preparation of the medical composition or vaccine.

L6 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:587648 CAPLUS
DOCUMENT NUMBER: 137:139355
TITLE: Hepatitis C virus multiple copy epitope fusion antigens for diagnosis and treatment of **HCV** infection
INVENTOR(S): Valenzuela, Pablo D. T.; Chien, David Ying
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: U.S., 24 pp., Cont.-in-part of U.S. Ser. No. 653,226.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6428792	B1	20020806	US 1997-859524	19970520
US 6514731	B1	20030204	US 1996-653226	19960524
CA 2250723	AA	19971127	CA 1997-2250723	19970523
WO 9744469	A2	19971127	WO 1997-US8950	19970523
WO 9744469	A3	19971231		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				

DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

EP 935662	A2	19990818	EP 1997-927767		19970523
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
NZ 333431	A	20000526	NZ 1997-333431		19970523
JP 2001500723	T2	20010123	JP 1997-542848		19970523
US 2003044774	A1	20030306	US 2002-174652		20020617
PRIORITY APPLN. INFO.:			US 1996-653226	A2	19960524
			US 1997-859524	A	19970520
			WO 1997-US8950	W	19970523

AB Human hepatitis C virus (**HCV**) has been identified as the etiol. agent of non-A, non-B hepatitis (NANBH). **HCV** viruses display considerable genotypic and phenotypic heterogeneity. Thus, there is considerable need in the art for more sensitive reagents that facilitate the detection of **HCV** variants. The genome of hepatitis C virus (**HCV**) consists of seven functional regions: the **core**, E1, E2/NS1, NS2, **NS3**, NS4, and **NS5** regions. An attempt was made to improve the sensitivity of anti-**HCV** assays by developing multiple copy epitope fusion antigens (MEFAs) which incorporate the major immunodominant epitopes from the functional regions of the **HCV** genome. These MEFAs are encompassed by the following generic structural formula: (A)x-(B)y-(C)z. This formula represents a linear amino acid sequence comprising multiple copies of one **HCV** epitope (A) linked to multiple copies of another **HCV** epitope (B) which in turn is linked to multiple copies of yet another **HCV** epitope (C). Expression vectors carrying nucleic acid sequences comprising MEFA antigens carrying multiple copies of epitopes derived from the viral **core**, E1, E2, **NS3**, NS4, and **NS5** regions were prepared The resultant MEFA antigens were expressed, purified, and employed in suitable immunoassays for the detection of **HCV** -specific antisera. These antigens provide excellent sensitivity and specificity for the detection of **HCV**.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	2002:332210 CAPLUS
DOCUMENT NUMBER:	136:339486
TITLE:	Identification of HLA-DR11/12-restricted epitopes of hepatitis C virus
INVENTOR(S):	Godkin, Andrew James; Thomas, Howard
PATENT ASSIGNEE(S):	Imperial College Innovations Limited, UK
SOURCE:	PCT Int. Appl., 72 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2002034770	A1	20020502	WO 2001-GB4636		20011018
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
AU 2002010683	A5	20020506	AU 2002-10683		20011018
PRIORITY APPLN. INFO.:			GB 2000-26094	A	20001025

WO 2001-GB4636 W 20011018

AB The authors disclose the use of a computer program to predict HLA-DR11-restricted peptide epitopes derived from the hepatitis C virus (**HCV**) polyprotein. The authors identify four immunodominant epitopes from three **HCV** proteins for CD4+ T-cells.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:142545 CAPLUS
DOCUMENT NUMBER: 136:198914
TITLE: Vaccines containing ribavirin as adjuvant
INVENTOR(S): Sallberg, Matti; Hultgren, Catharina
PATENT ASSIGNEE(S): Tripep AB, Swed.
SOURCE: PCT Int. Appl., 120 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002013855	A2	20020221	WO 2001-IB1808	20010815
WO 2002013855	A3	20030109		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2419418	AA	20020221	CA 2001-2419418	20010815
AU 2001092151	A5	20020225	AU 2001-92151	20010815
EP 1311289	A2	20030521	EP 2001-972379	20010815
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004506018	T2	20040226	JP 2002-518994	20010815

PRIORITY APPLN. INFO.:

US 2000-225767P	P	20000817
US 2000-229175P	P	20000829
US 2000-705547	A	20001103
WO 2001-IB1808	W	20010815

AB Compns. and methods for enhancing the effect of vaccines in animals, such as domestic, sport, or pet species, and humans are disclosed. More particularly, vaccine compns. comprising ribavirin and an antigen, preferably an antigen that has an epitope present in hepatitis A virus (HAV), hepatitis B virus (HBV), and hepatitis C virus (**HCV**) are disclosed for use in treating and preventing disease, preferably HAV, HBV and **HCV** infection.

L6 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:924100 CAPLUS
DOCUMENT NUMBER: 136:52715
TITLE: Immunoassays for anti-**HCV** antibodies
INVENTOR(S): Chien, David Y.; Arcangel, Phillip; Tandeske, Laura; George-Nasciemento, Carlos; Coit, Doris; Medina-Selby, Angelica
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2001096870	A2	20011220	WO 2001-US19156		20010614
WO 2001096870	A3	20030731			
W: AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
CA 2413003	AA	20011220	CA 2001-2413003		20010614
US 2002146685	A1	20021010	US 2001-881654		20010614
US 6632601	B2	20031014			
US 2002192639	A1	20021219	US 2001-881239		20010614
US 6630298	B2	20031007			
EP 1350105	A2	20031008	EP 2001-952156		20010614
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR					
BR 2001011682	A	20040106	BR 2001-11682		20010614
JP 2004510133	T2	20040402	JP 2002-510948		20010614
US 2004063092	A1	20040401	US 2003-637323		20030808
US 6797809	B2	20040928			
US 2004096822	A1	20040520	US 2003-643853		20030819
US 2004265801	A1	20041230	US 2004-899715		20040726
PRIORITY APPLN. INFO.:			US 2000-212082P	P	20000615
			US 2001-280811P	P	20010402
			US 2001-280867P	P	20010402
			US 2001-881239	A3	20010614
			US 2001-881654	A3	20010614
			WO 2001-US19156	W	20010614
			US 2003-637323	A1	20030808

AB **HCV** immunoassays comprising an **NS3**/4a conformational epitope and a multiple epitope fusion antigen are provided, as well as immunoassay solid supports for use with the immunoassays.

L6 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	2001:670798 CAPLUS
DOCUMENT NUMBER:	136:257932
TITLE:	Development and characterization of recombinant hepatitis delta virus-like particles
AUTHOR(S):	Ward, Scott Matthew; Macnaughton, Thomas Bernard; Gowans, Eric James
CORPORATE SOURCE:	Clinical Medical Virology Centre, The University of Queensland, St. Lucia, 4067, Australia
SOURCE:	Virus Genes (2001), 23(1), 97-104 CODEN: VIGEET; ISSN: 0920-8569
PUBLISHER:	Kluwer Academic Publishers
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB Injection of particulate hepatitis B virus surface antigen (HBsAg) in mice leads to the induction of a HBsAg-specific class-I-restricted cytotoxic T lymphocyte (CTL) response. It is proposed that any protein internal to HBsAg will also be able to elicit a specific CTL response. In this study, several carboxy-terminal truncations of hepatitis C virus (**HCV**) **core** protein were fused to varying lengths of amino-terminal truncated large hepatitis delta antigen (L-HDAg). These constructs were analyzed for their ability to be expressed and the particles secreted in the presence of HBsAg after transfection into HuH-7 cells. The secretion efficiency of the various **HCV core**-HDAg chimeric proteins was generally poor. Constructs containing full length HDAg appeared to be more stable than truncated versions and the length of the inserted protein was restricted to around 40 amino acids. Thus, the use of L-HDAg as a chimera to package foreign proteins is limited. Consequently, a polyepitope (polytope) containing a B-cell epitope from human papillomavirus (HPV 16) and multiple T-cell epitopes from the **HCV** polyprotein was used to create the construct, L-HDAg-polyB. This chimeric protein was shown to be reliant on the co-expression of HBsAg for secretion into the cell culture fluid and was secreted more efficiently than the previous

HCV core-HDAg constructs. These L-HDAg-polyB virus-like particles (VLPs) had a buoyant d. of .apprx.1.2 g/cm3 in cesium chloride and .apprx.1.15 g/cm3 in sucrose. The VLPs were also immunopptd. using an anti-HBs but not an anti-HD antibody. Thus, these recombinant VLPs have similar biophys. properties to L-HDAg VLPs.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:835361 CAPLUS

DOCUMENT NUMBER: 134:16523

TITLE: Diagnosis of, and vaccination against, a positive stranded RNA virus using an isolated, unprocessed polypeptide encoded by a substantially complete genome of such virus

INVENTOR(S): Liao, Jaw-Ching; Wang, Cheng-Nan

PATENT ASSIGNEE(S): Bionova Corporation, USA

SOURCE: U.S., 35 pp., Cont.-in-part of U.S. Ser. No. 962,989, abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6153378	A	20001128	US 1995-454928	19950531
US 5625034	A	19970429	US 1993-143579	19931026
CA 2222968	AA	19961205	CA 1996-2222968	19960531
WO 9638474	A2	19961205	WO 1996-US8112	19960531
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
ZA 9604480	A	19961212	ZA 1996-4480	19960531
AU 9659575	A1	19961218	AU 1996-59575	19960531
EP 828756	A2	19980318	EP 1996-916828	19960531
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1189838	A	19980805	CN 1996-195184	19960531
JP 11506328	T2	19990608	JP 1996-536677	19960531
BR 9608676	A	19991207	BR 1996-8676	19960531

PRIORITY APPLN. INFO.:

US 1992-962989	B2	19921016
US 1992-963483	B3	19921016
US 1993-143579	A2	19931026
US 1995-454928	A	19950531
WO 1996-US8112	W	19960531

AB The unprocessed polyprotein initially translated from the genome of a pos.-stranded RNA virus contains epitopic configurations that are not retained in the processed proteins. The structural protein region, in particular, loses an epitopic configuration upon processing at the cleavage site between the genomic region encoding the **core** protein and the genomic region encoding the protein adjacent the **core** protein, such as the envelope protein in **HCV**. Compns., methods and assays relating to the diagnosis and detection of the presence of the pos.-stranded RNA virus, or antibodies to the pos.-stranded RNA virus, in a sample. Compns. and methods for the induction of immune responses in, and vaccination of, an animal. Combination of the unprocessed **core** region with a non-structural protein (such as an **NS5** or an unprocessed **NS3**-NS4 fusion from **HCV**).

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:298250 CAPLUS

DOCUMENT NUMBER: 131:127333
TITLE: Use of a novel hepatitis C virus (**HCV**) major-epitope chimeric polypeptide for diagnosis of **HCV** infection
AUTHOR(S): Chien, David Y.; Arcangel, Phillip; Medina-Selby, Angelica; Coit, Doris; Baumeister, Mark; Nguyen, Steve; George-Nascimento, Carlos; Gyenes, Alexander; Kuo, George; Valenzuela, Pablo
CORPORATE SOURCE: Chiron Corporation, Emeryville, CA, 94507, USA
SOURCE: Journal of Clinical Microbiology (1999), 37(5), 1393-1397
CODEN: JCMIDW; ISSN: 0095-1137
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The genome of hepatitis C virus (**HCV**) consists of seven functional regions: the **core**, E1, E2/NS1, NS2, **NS3**, NS4, and **NS5** regions. The U.S. Food and Drug Administration-licensed 2.0G immunoassay for the detection of anti-**HCV** uses proteins from the **core**, **NS3**, and NS4 regions. The 3.0G ELISA includes the protein from the **NS5** region. The necessity of detecting antibodies to viral envelope proteins (E1 and E2) and to different genotype samples has been demonstrated previously. In this study we have attempted to improve the sensitivity of the anti-**HCV** assay by developing a single multiple-epitope fusion antigen (MEFA; MEFA-6) which incorporates all of the major immunodominant epitopes from the seven functional regions of the **HCV** genome. A nucleic acid sequence consisting of proteins from the viral **core**, E1, E2, **NS3**, NS4, and **NS5** regions and different subtype-specific regions of the NS4 region was constructed, cloned, and expressed in yeast. The epitopes present on this antigen can be detected by epitope-specific monoclonal and polyclonal antibodies. In a competition assay, the MEFA-6 protein competed with 83 to 96% of genotype-specific antibodies from **HCV** genotype-specific peptides. This recombinant antigen was subsequently used to design an anti-**HCV** chemiluminescent immunoassay. We designed our assay using a monoclonal anti-human IgG antibody bound to the solid phase. Because MEFA-6 is fused with human superoxide dismutase (h-SOD), we used an anti-human superoxide dismutase, di-Me acridinium ester-labeled monoclonal antibody for detection. Our results indicate that MEFA-6 exposes all of the major immunogenic epitopes. Its excellent sensitivity and specificity for the detection of clin. seroconversion are demonstrated by this assay.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:286360 CAPLUS
DOCUMENT NUMBER: 126:263158
TITLE: Spliced peptides for the diagnosis and detection of hepatitis C virus (**HCV**) infection
INVENTOR(S): Hosein, Barbara; Wang, Chang Yi
PATENT ASSIGNEE(S): United Biomedical, Inc., USA
SOURCE: Ger. Offen., 71 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
DE 19549390	A1	19970320	DE 1995-19549390		19951027
DE 19549390	C2	19971023			
US 5736321	A	19980407	US 1995-530550		19950919
DE 19540105	C1	19970220	DE 1995-19540105		19951027
PRIORITY APPLN. INFO.:			US 1995-530550	A	19950919
			DE 1995-19540105	A3	19951027
			US 1994-333573	B2	19941101

AB Novel peptides are disclosed which are specific for the diagnosis of hepatitis C virus (**HCV**) infection, as are compns. containing mixts. of these peptides. The peptides have at least one antigenic region which is effective in the detection of **HCV**-associated antibodies using an immunoassay. A novel spliced peptide is disclosed which can be used to block the non-specific reactivity of particular NS-3 conformational epitopes. The fused peptide composition includes (1) a linear fused peptide in which the C-terminus is a -COOH or -CONH2 group, (2) one or more of several disclosed peptide sequences, and (3) an amino acid sequence corresponding to the NS-3 region of **HCV**. Thus, different mixts. of peptides were used detect antibodies in a panel of human sera. Mixts. A and B and D and E showed comparable sensitivity on the whole, but with samples containing **core** protein 2 and 3, the D and E mixts. showed higher sensitivity than the A and B mixts.

L6 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:54036 CAPLUS
DOCUMENT NUMBER: 126:73782
TITLE: Unprocessed **core**-envelope **fusion protein** and nonstructural protein for the diagnosis of and vaccination against hepatitis C virus
INVENTOR(S): Liao, Jaw-Ching; Wang, Cheng-Nan
PATENT ASSIGNEE(S): Bionova Corporation, USA; Liao, Jaw-Ching; Wang, Cheng-Nan
SOURCE: PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9637606	A1	19961128	WO 1996-US7378		19960522
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI					
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN					
ZA 9604094	A	19961203	ZA 1996-4094		19960522
AU 9659243	A1	19961211	AU 1996-59243		19960522
PRIORITY APPLN. INFO.:			US 1995-447276	A	19950522
			WO 1996-US7378	W	19960522

AB The unprocessed **core** protein region initially translated from the genome of hepatitis C virus (**HCV**) contains epitopic configurations that are not retained in the processed proteins. In particular, the **core** protein loses an epitopic configuration upon processing at the cleavage site between the genomic region (e.g., gene) encoding the **core** protein and the genomic region encoding the adjacent envelope region. The unprocessed epitopic configuration of the **core** region provides an improved ability to detect the presence of **HCV**, or antibodies to **HCV**, in a sample, including an unpurified sample or a sample of very small volume (which can be particularly helpful when testing a sample from an infant or other person having very little blood (or other suitable material) available for testing). Combining the unprocessed **core** region with a nonstructural protein (such as an **NS5** or an **NS3**-NS4 fusion) results in a synergistic effect that greatly enhances the already improved sensitivity and specificity provided by the unprocessed **core** region. The unprocessed epitopic configuration of the **core** region also provides an improved ability to induce an immune response upon administration of the **core** region into an animal. Recombinant methods are described for the preparation of a cloned DNA mol. (EN-80-2) derived from the **HCV core** and envelope regions and for a clone (EN-80-1) encoding the **NS5** nonstructural protein.

L6 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:232253 CAPLUS
DOCUMENT NUMBER: 118:232253
TITLE: Hepatitis C assay utilizing recombinant antigens from **NS5** region
INVENTOR(S): Desal, Suresh M.; Dailey, Stephen H.; Devare, Sushil G.
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: PCT Int. Appl., 164 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9304089	A1	19930304	WO 1992-US6964	19920821
W: AU, CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
AU 9224927	A1	19930316	AU 1992-24927	19920821
EP 600000	A1	19940608	EP 1992-918623	19920821
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE				
JP 06510289	T2	19941117	JP 1993-504550	19920821
US 6172189	B1	20010109	US 1997-867611	19970602
US 6593083	B1	20030715	US 2000-690359	20001017

PRIORITY APPLN. INFO.:

US 1991-748565	A	19910821
US 1990-572822	YY	19900824
US 1990-614069	B2	19901107
US 1991-748561	B2	19910821
US 1991-748566	B2	19910821
WO 1992-US6964	A	19920821
US 1992-989843	B1	19921119
US 1994-179896	B1	19940110
US 1996-646757	B1	19960501
US 1997-867611	A3	19970602

AB A recombinant antigen is disclosed which represents the distinct **NS5** antigenic region of the hepatitis C virus (**HCV**) genome and which can be used in the detection of antibodies and antigens in body fluids from individuals exposed to **HCV**. Also disclosed is an assay for detecting the presence of an antibody to an **HCV** antigen in a sample by contacting the sample with the recombinant antigen. Preferred assay formats include a screening assay, a confirmatory assay, a competition or neutralization assay, and an immunodot assay. Specifically claimed is recombinant **fusion protein HCV** CKS-**NS5** EF (amino acid sequence included), which consists of 239 amino acids of CKS (Escherichia coli enzyme CMP-KDO synthetase), 9 amino acids contributed by linker DNA sequences, and 550 amino acids from the **NS5** region of the **HCV** genome. Other recombinant antigens (**fusion proteins**) for **HCV** detection are also described. Using a group of 233 specimens representing 23 hemodialysis patients having clin. diagnosed non-A non-B hepatitis, data indicated that detection of anti-**HCV** by a screening assay using pHCV-31 and pHCV-34 products may occur at an equivalent bleed date or as many as 9 mo earlier when compared with a c100-3 screening assay.

L6 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1992:529836 CAPLUS
DOCUMENT NUMBER: 117:129836
TITLE: Hepatitis C antibody assay utilizing recombinant antigens
INVENTOR(S): Devare, Sushil G.; Desai, Suresh M.; Casey, James M.; Dawson, George J.; Lesniewski, Richard R.; Dailey, Stephen H.; Gutierrez, Robin A.; Stewart, James Lawrence
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: Eur. Pat. Appl., 115 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 472207	A2	19920226	EP 1991-114161	19910823
EP 472207	A3	19920826		
EP 472207	B1	19991013		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE				
CA 2049679	AA	19920225	CA 1991-2049679	19910822
CA 2049679	C	19920225		
AU 9182774	A1	19920507	AU 1991-82774	19910823
AU 655592	B2	19950105		
AT 185605	E	19991015	AT 1991-114161	19910823
ES 2139571	T3	20000216	ES 1991-114161	19910823
JP 04281792	A2	19921007	JP 1991-240587	19910826
JP 3354579	B2	20021209		
US 6172189	B1	20010109	US 1997-867611	19970602
US 6593083	B1	20030715	US 2000-690359	20001017

PRIORITY APPLN. INFO.:

US 1990-572822	A	19900824
US 1990-614069	A	19901107
US 1991-748561	B2	19910821
US 1991-748565	A2	19910821
US 1991-748566	B2	19910821
US 1992-989843	B1	19921119
US 1994-179896	B1	19940110
US 1996-646757	B1	19960501
US 1997-867611	A3	19970602

AB Immunoassays for detecting antibodies to antigens of hepatitis C virus (**HCV**) in a fluid sample are disclosed which use recombinant antigens. The antigens are fusion products with CMP-KDO synthetase (CKS) and are produced in Escherichia coli. The cloning vector pJO200 was used to fuse DNA encoding the recombinant proteins to DNA for CKS. Plasmid pHCV-34, encoding CKS-**HCV core** antigen (amino acids 1-150) fusion product, was prepared and expressed in E. coli. A screening immunoassay using this recombinant CKS-**core** fusion product and **fusion protein** CKS-33-BCD (prepared from plasmid pHCV-31; containing amino acid sequences from **HCV NS3** and NS4 proteins) was sufficiently sensitive to detect seroconversion during the acute phase of **HCV** infection in chimpanzees. No preinoculation specimens were reactive.